

# ***Idea/onics***

## **Installation for the AV-Mini Comb**

**(50 Channel Audio/Video Comb Generator)**

**and**

**AV-70 *Junior***

**(71 Channel Audio/Video Comb Generator)**

Box 369  
879 West Main  
Mayville, ND 58257  
701-786-3904  
[www.Idea-onics.com](http://www.Idea-onics.com)

***Idea/onics AV-70 Junior***  
**(Audio/Video Comb Generator)**

Congratulations on the purchase of an Idea/onics AV-70 Jr. for meeting your EAS needs.

The following instructions should enable you to install and operate your EAS system in just a few hours. For further support or technical assistance, please contact Idea/onics engineering at (701) 786-3904.

*The Idea/onics AV-70 Jr. Audio/Video Comb Generator fills the need for cable systems desiring all channel audio and video alerting and can advise viewers to tune to a specific information channel for continuing information.*

The Idea/onics AV-70 Jr. is the first audio and video comb generator on the market. The AV-70 Jr. provides you with the easiest installation of an EAS system and the least amount of rack space (as little as 3 ½ inches). It requires no switchers and is compatible with all headends up to 70 channels.

The Idea/onics AV-70 Jr. system is used in conjunction with a receiver package, encoder/decoder and character generator (***Idea/onics CG1000***).

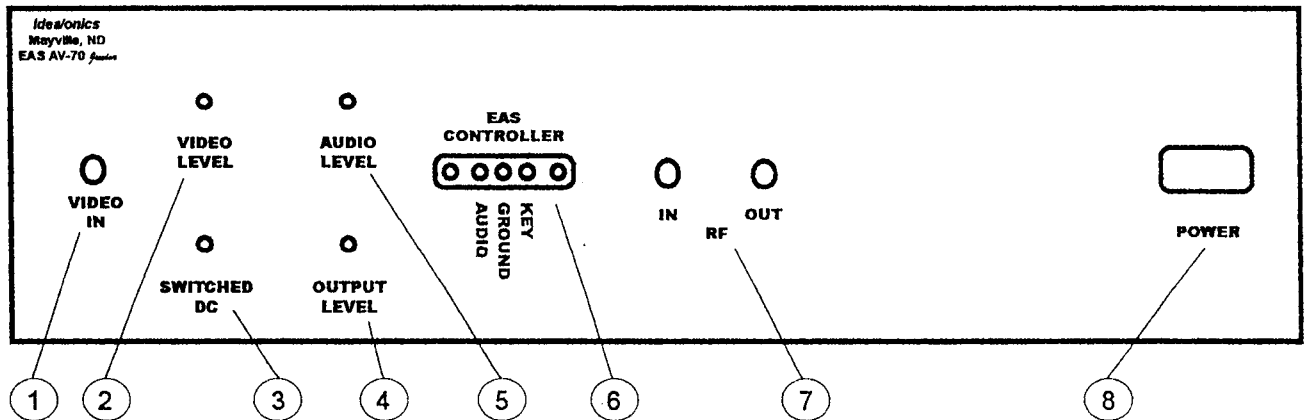
**INSTALLATION OF THE IDEA/ONICS  
AV-70 Jr. / SAM MIP-921(with video gen.)  
EAS SYSTEM**

- Connect the *EAS CONTROLLER* block on the Idea/onics AV-70 Jr. to the SAM MIP-921 Block (Pin 1 Gr. Pin 6 Key & Pin 7 audio) with any standard audio cable.
- Connect the *CG OUT* from the MIP 921 to the *VIDEO LOOP* of the AV-70 Jr. The video level from the character generator can be adjusted on the back of the AV-70 Jr. with the VIDEO LEVEL control for best picture.
- Loop the headend output thru the AV-70 Jr. using the *RF IN* and *OUT* ports.
- Set the output level of the AV-70 Jr. to match the output of the headend with the OUTPUT LEVEL control on the back of the AV-70 Jr. This is factory preset to +33dB. When testing the AV-70 Jr. only you can activate the unit by placing a jumper between the key and ground on the EAS CONTROLLER block on the back of the unit.
- To test the complete system, press and hold the Yes & Enter on the front of the MIP 921 for about 2 seconds.
- If you have a printer in your MIP 921 you'll need to go through these steps to install the THERMAL paper. Put the paper in the holder feeding off the top front. You need to cut it to a slight point and feed it into the bottom of the print unit using the advance paper mode.

To get to the advance paper mode.  
Have unit in the MIP ready mode  
Press enter  
Press mode twice: You'll get monitor inputs  
Press no: You'll get time and date  
Press no: You'll get change mode  
Press no: You'll get advance paper  
Press yes repeatedly and feed the paper in.

If you make a mistake wait and start over.

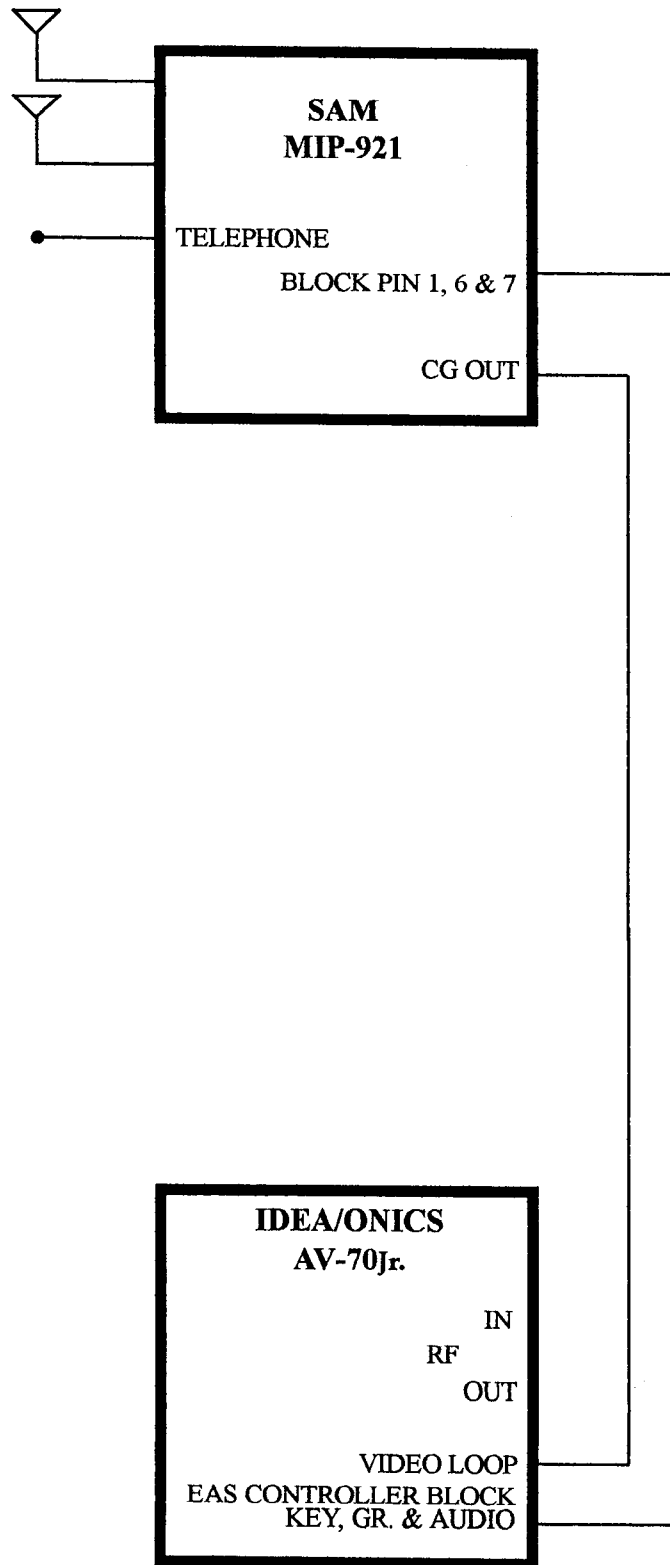
# Idea/onics AV-70 Junior Back Panel



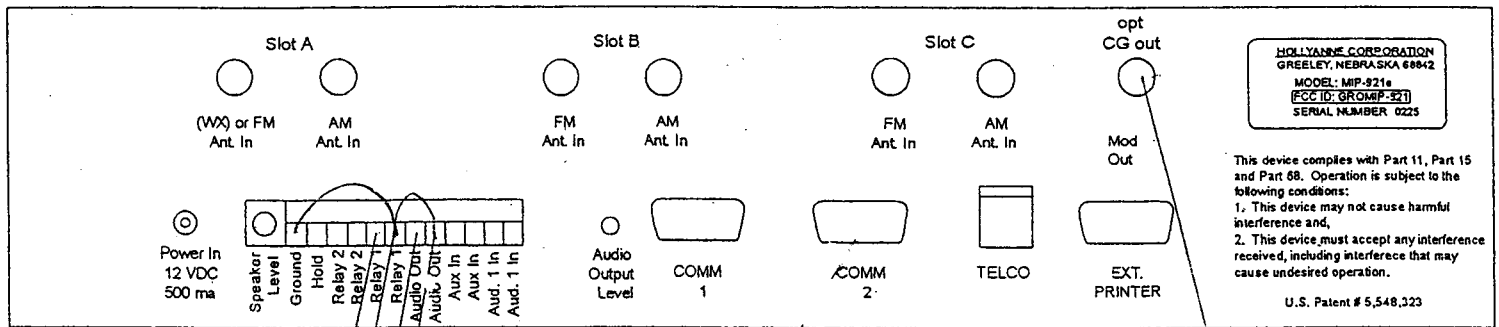
- ① VIDEO IN Video input from the character generator.
- ② VIDEO LEVEL. Video input level adjustment.
- ③ SWITCHED DC. Switched DC to control external trunk switches.
- ④ OUTPUT LEVEL Output adjust of the AV-70 Junior to match the headend output.
- ⑤ AUDIO LEVEL. Audio level input adjustment.
- ⑥ EAS CONTROLLER. Connection to the EAS Encoder/Decoder.
- ⑦ RF IN/OUT. High isolation trunk switch.
- ⑧ POWER. AC power input. 120VDC, 60Hz.

For more information contact *Idea/onics* engineering at 701-786-3904.

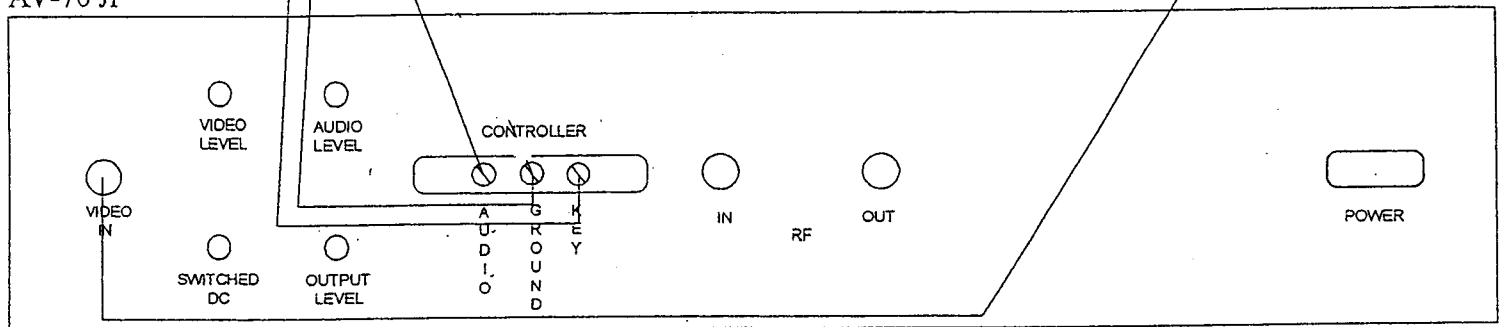
Typical *Idea/onics* AV-70Jr. installation



MIP-921<sup>e</sup>



AV-70 Jr



## Specifications for the *Idea/onics* EAS AV-70 *Junior*

- AV-70*Junior* Audio and video on all channels 2 through 70 (500+ MHz)
- Audio and video on 70 channels
- Proven design
- Eliminates wiring headend channels for all channel video
- Compatible with ALL encoder/decoders
- Saw filter design
- Video
  - Input level: 0.5 to 2 Volts Peak to Peak
  - Frequency response:  $\pm 1$  dB, 10 – 4.2 MHz
  - Standard: U.S. System NTSC sync negative
  - Input type: Clamped video, Negative sync.
- Audio
  - Audio carrier level: -16 dB below video carrier
  - Automatic Gain Control: 30 dB
  - FM Deviation:  $\pm 25$  KHz automatic
  - Input level: 0.3 to 3 Volts Peak to Peak
  - Frequency Stability:  $\pm 1$  KHz
  - Frequency response:  $\pm 1$  dB 30Hz to 15 KHz
- Adjustable RF output control Up to 40 dB
- Trunk Switch
  - Insertion loss: .3 dB max..
  - Return Loss: 20 dB min.
  - Impedance: 75  $\Omega$
  - Isolation: 70dB min.
- FCC Offset (  $\pm 3$  KHz in the aeronautical band )
- Channel flatness: 3dB
- Switching power supply for continuous cool operation
- Standard 3 ½" by 19" rackmount.
- Full two year warranty

## **Specifications for the *Idea/onics* EAS AV-MINI COMB**

- AV-MINI COMB Audio and video on all channels 2 through 50 (379.25MHz)
- Audio and video on 50 channels
- Proven design
- Eliminates wiring headend channels for all channel video
- Compatible with ALL encoder/decoders
- Saw filter design
- Video
  - Input level: 0.5 to 2 Volts Peak to Peak
  - Frequency response:  $\pm 1$  dB, 10 – 4.2 MHz
  - Standard: U.S. System NTSC sync negative
  - Input type: Clamped video, Negative sync.
- Audio
  - Audio carrier level: -16 dB below video carrier
  - Automatic Gain Control: 30 dB
  - FM Deviation:  $\pm 25$  KHz automatic
  - Input level: 0.3 to 3 Volts Peak to Peak
  - Frequency Stability:  $\pm 1$  KHz
  - Frequency response:  $\pm 1$  dB 30Hz to 15 KHz
- Adjustable RF output control Up to 40 dB
- Trunk Switch
  - Insertion loss: .3 dB max..
  - Return Loss: 20 dB min.
  - Impedance: 75  $\Omega$
  - Isolation: 70dB min.
- FCC Offset (  $\pm 3$ KHz in the aeronautical band )
- Channel flatness: 3dB
- Switching power supply for continuous cool operation
- Standard 3 1/2" by 19" rackmount.
- Full two year warranty



**\*\*\*LIMITED WARRANTY\*\*\***

*Idea/onics equipment is warranted for two years against factory imperfections in material and workmanship.*

*In the event that service is required during this period, return the defective unit to the factory at this address:*

*Idea/onics  
879 West Main  
Mayville, North Dakota  
58257*

*Pack the unit carefully and explain in a letter the reasons the unit is believed to be defective. You must prepay the shipping charges. The unit will be repaired at no charge.*

*Such service or repairs as may be necessary as the result of abuse or accident are not included in the warranty.*

*In the event that service is required after the warranty period, the unit should be returned to Idea/onics at the above address where it will be repaired at the established service charge. Unit must be accompanied with a repair authorization.*

*Seller shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or the liability to use the product.*